

Symposium: Clinical practice: AN AUSTRALIAN PERSPECTIVE



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With Thanks To Andrew Matthews general manager workforce transformation SHPA



Objective



- This workshop will address how to:
 - Transform education of pharmacists to better prepare them for a clinical role
 - From the perspective of a director of pharmacy in a large teaching hospital in Australia who requires his clinical workforce to demonstrate adding value by optimising patient care



Brisbane, Australia

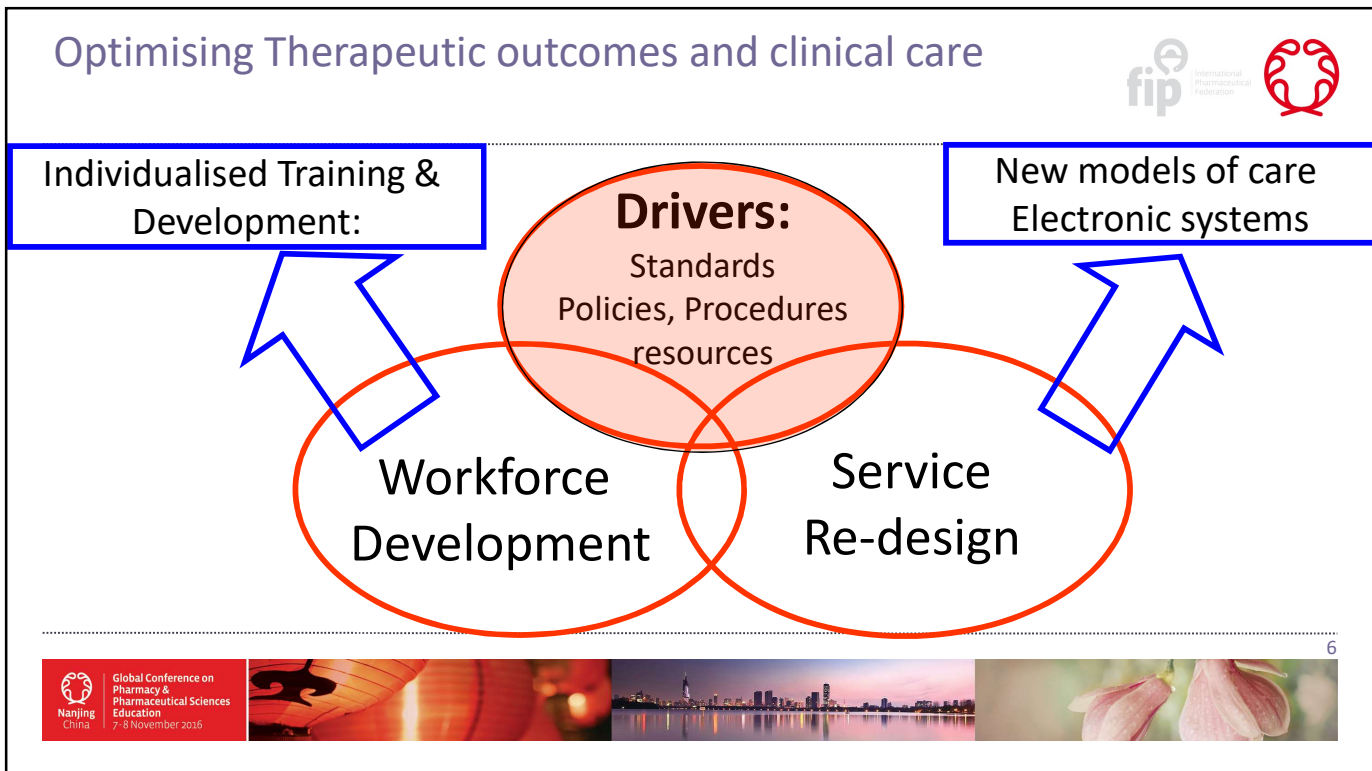
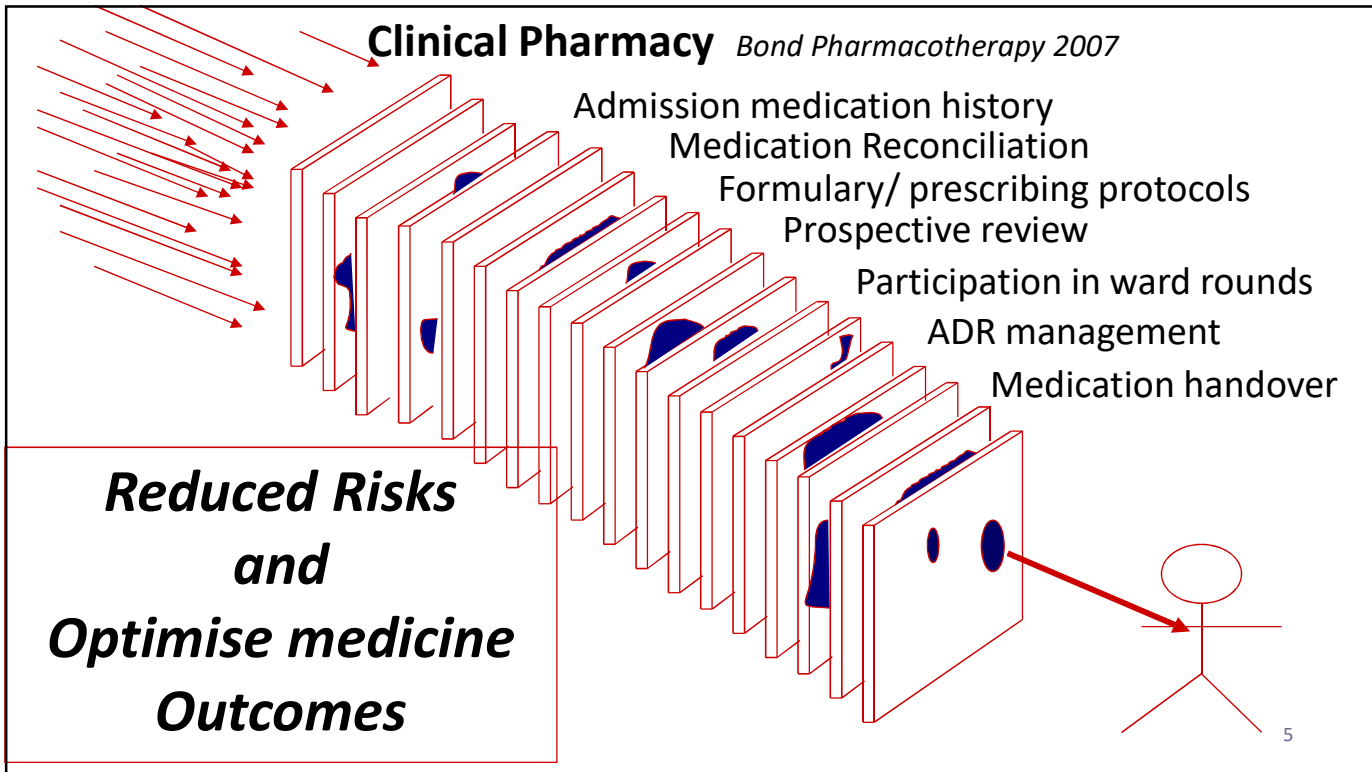


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7-8 November 2016



Royal Brisbane and Women's Hospital Queensland, Australia





Drivers of pharmacy transformation

- Social, political, economic
- Goal: to optimise therapeutic + health outcomes
- Need: Competent and capable workforce
- Adaptable and transferrable knowledge and skills
- Standards, policies procedures, guidelines
- Consistent, transparent education and training
- Professional recognition by patients and peers



Optimising Therapeutic outcomes and clinical care

Individualised Training & Development:

New models of care
Electronic systems

Drivers:

Standards
Policies, Procedures
resources

Workforce
Development

Service
Re-design



Medication management systems and pharmacists' roles are changing



| | | | | | |
|-------------------------|------------------------------------|------------------|----------------------|------|---|
| Date | Drug (use Generic Name) Print | | Tick if Slow release | 0800 | ✓ |
| 15/10/17 | Clenbuterol | | | | |
| Route | Dose & frequency & NOW enter times | | d SIC | 2000 | ✓ |
| SIC | | | | | |
| Pharmacy | Dr Signature | Print Name | | | |
| ⑩ 16/7 SIC | | | | | |
| Additional Instructions | | Discharge Supply | | | |
| | | | | | |

FROM:

Traditional Dispensing

AND

error prone handwritten prescriptions



From Manual To Electronic Era



The new dispenser
Error rate 0.001% of items

Electronic prescribing

| Date | Medication | Refills | Destination | Provider / Location | Status |
|------------|------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------|-----------------------|---------------------|
| 04/29/2015 | Search for medication Type: Routine Frequency: Optional, assists with d Quantity: Days: Refills: 0 | 0 | No Pharmacy Selected | MW - MARCUS WE MAIN | Not Sent or Printed |
| 09/14/2014 | 1 take 1 tablet by mouth once a day (02/25/2015 for 30 days) | 0 refills | No Pharmacy Selected | MARCUS WELBY, MD MAIN | Current - Saved |
| 09/14/2014 | albuterol sulfate 0.63 mg/3 mL inhalation solution for nebulization 2 puffs every 6 hours for wheezing (09/14/2014 for days) | 0 refills | No Pharmacy Selected | MARCUS WELBY, MD MAIN | Current - Signed |
| 09/14/2014 | metoprolol tartrate 25 mg oral tablet by mouth once daily (09/14/2014 for days) | 0 refills | No Pharmacy Selected | MARCUS WELBY, MD MAIN | Current - Signed |

A Perfect Storm



Balance: targets vs patient care



REVIEW ARTICLE

Clinical Pharmacists and Inpatient Medical Care

A Systematic Review

Peter J. Kaboli, MD, MS; Angela B. Hoth, PharmD;
Brad J. McClimon, MD, PharmD; Jeffrey L. Schnipper, MD, MPH

BMJ
open

**Perioperative medication management:
expanding the role of the preadmission
clinic pharmacist in a single centre,
randomised controlled trial of
collaborative prescribing**

Pharmacist Participation on Physician Rounds and Adverse Drug Events in the Intensive Care Unit

JAMA, July 21, 1999—Vol 281, No. 3 267

Lucian L. Leape, MD
David J. Cullen, MD

Context Pharmacist review of medication orders in the intensive care unit (ICU) has been shown to prevent errors, and pharmacist consultation has reduced drug costs.

Clinical Teams- where is the pharmacist?



Working as part of the clinical Team to optimise patient's medication



Ambulatory/ out patient clinics roles

- Home and GP based Med
- Surgical pre assessment
- Heart failure
- Hepatitis
- Smoking cessation
- Epilepsy
- Rheumatology



Optimising Therapeutic outcomes and clinical care

Individualised Training & Development:

Evaluation, Feedback, plan

Drivers:

Standards
Policies, Procedures
resources

New models of care
Electronic systems

Workforce Development

Service Re-design



Workforce Numbers vs Performance

Capacity
Workforce Numbers
The Number pharmacist per
patient episode

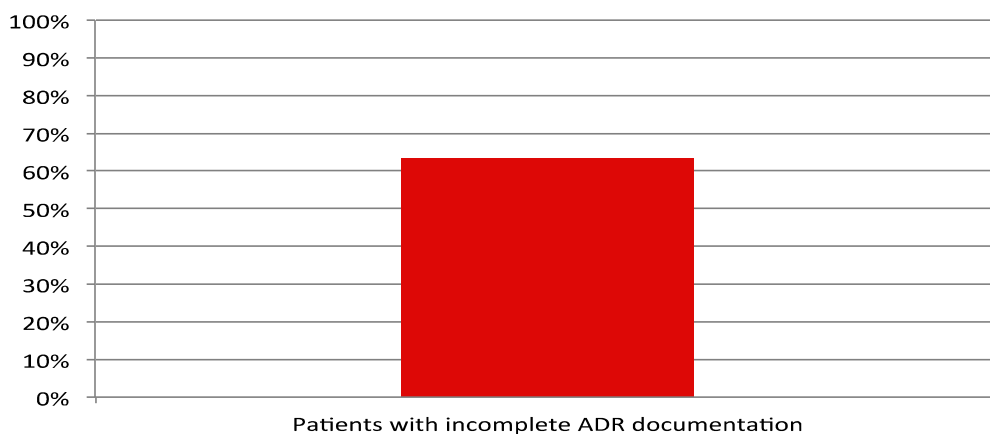
VS

Capability
Consistent competent
performance

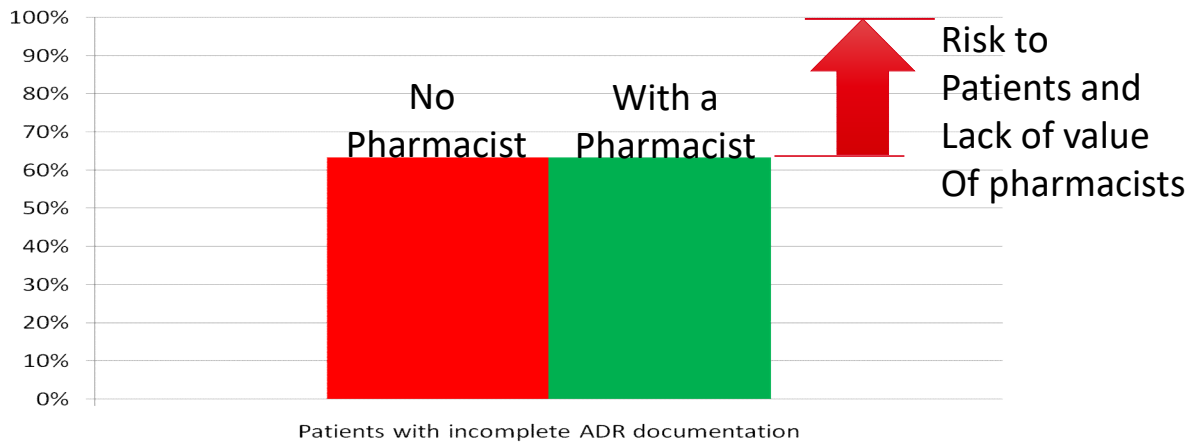
It is **WHAT** pharmacists do and **HOW** well they do it **NOT** just More pharmacist



ADR history documentation for 161 pts without a pharmacy review,



ADR history documentation with a pharmacy review



Mrs G, 82 yr lady, – On admission

- RACF, via DEM
- Presenting complaint:
 - back pain
- Past Medical History
 - Hypertension
 - Peptic Ulcer
 - Reflux oesophagitis
 - Osteoporosis
 - Depression

- Medication History taken by pharmacist on admission:
- Metoprolol
 - Pantoprazole
 - Fluoxetine
 - Frusemide
 - Thyroxine
 - Potassium
 - Insulin
 - Clopidogrel



BUT THESE MEDICATIONS WERE FOR A DIFFERENT PATIENT!

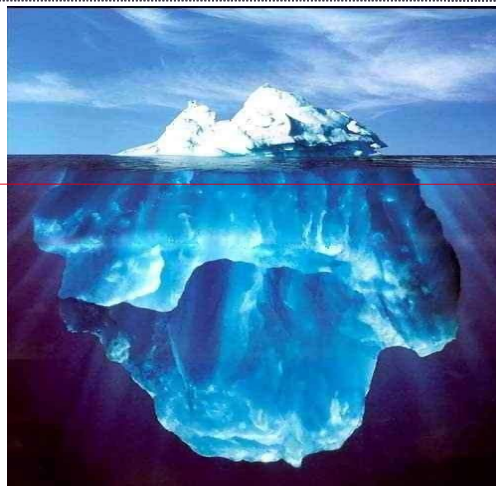
Pharmacist did not:

- Use Emergency notes
- Use previous discharge medication list
- Confirm with community Dr or pharmacists
- Did not reconcile Problems VS medicines



The Competency iceberg

Need Effective and persistent behaviour



Knowledge

Skills

Abilities

Values

Attitudes



The majority of species can learn competences...



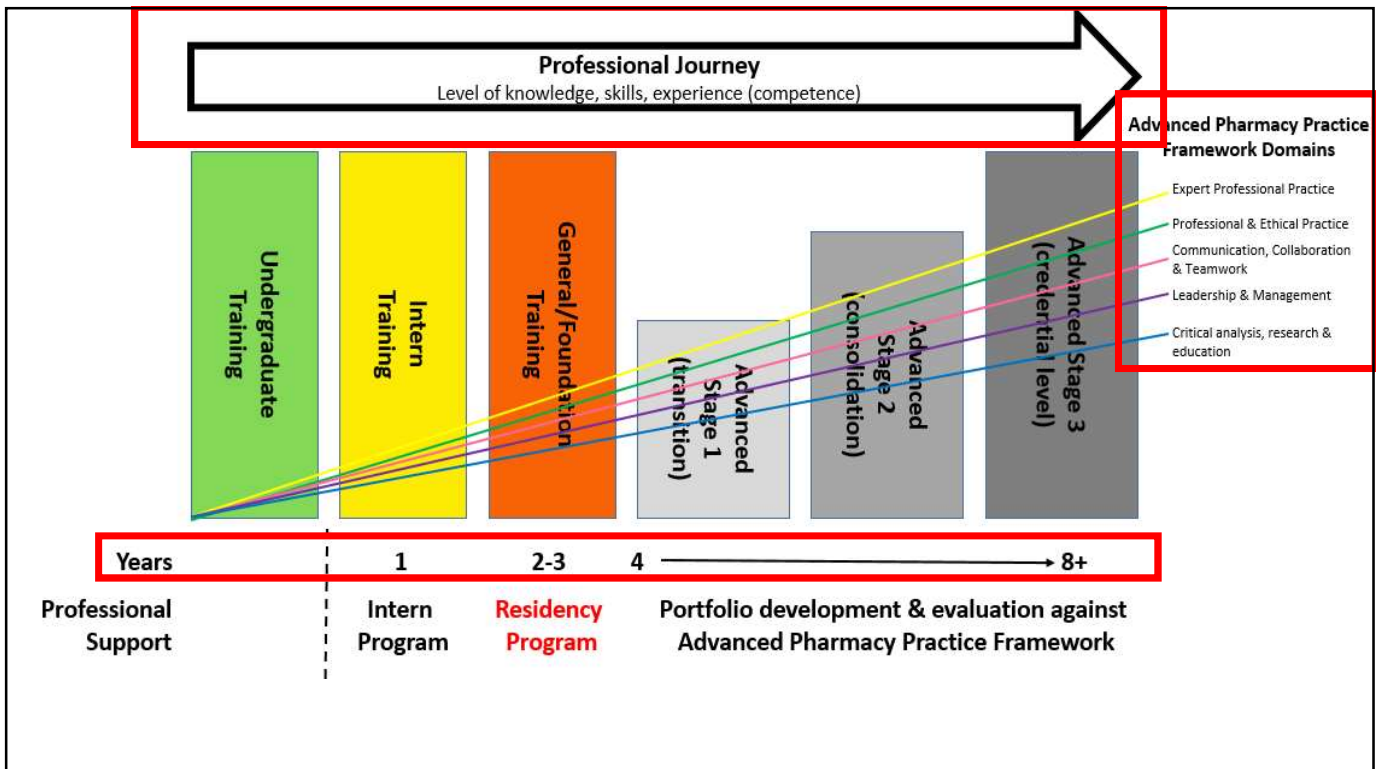
What will guide pharmacist development?



Competency Standards



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Competency Frameworks

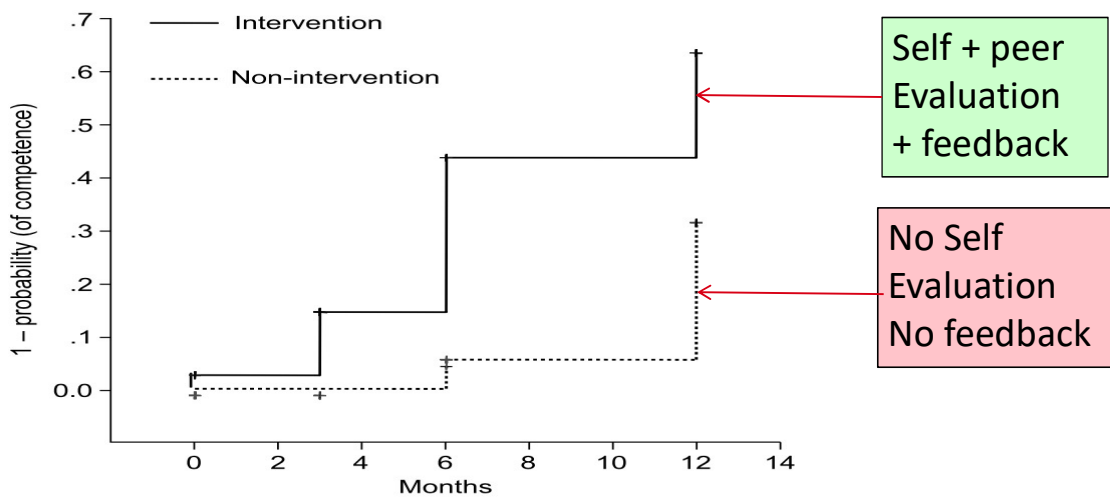


- A Global Competency Framework
- Assembly of competencies
- Be used to identify what do well and where gaps exist
- To help guide needs based learning and pharmacy practitioners

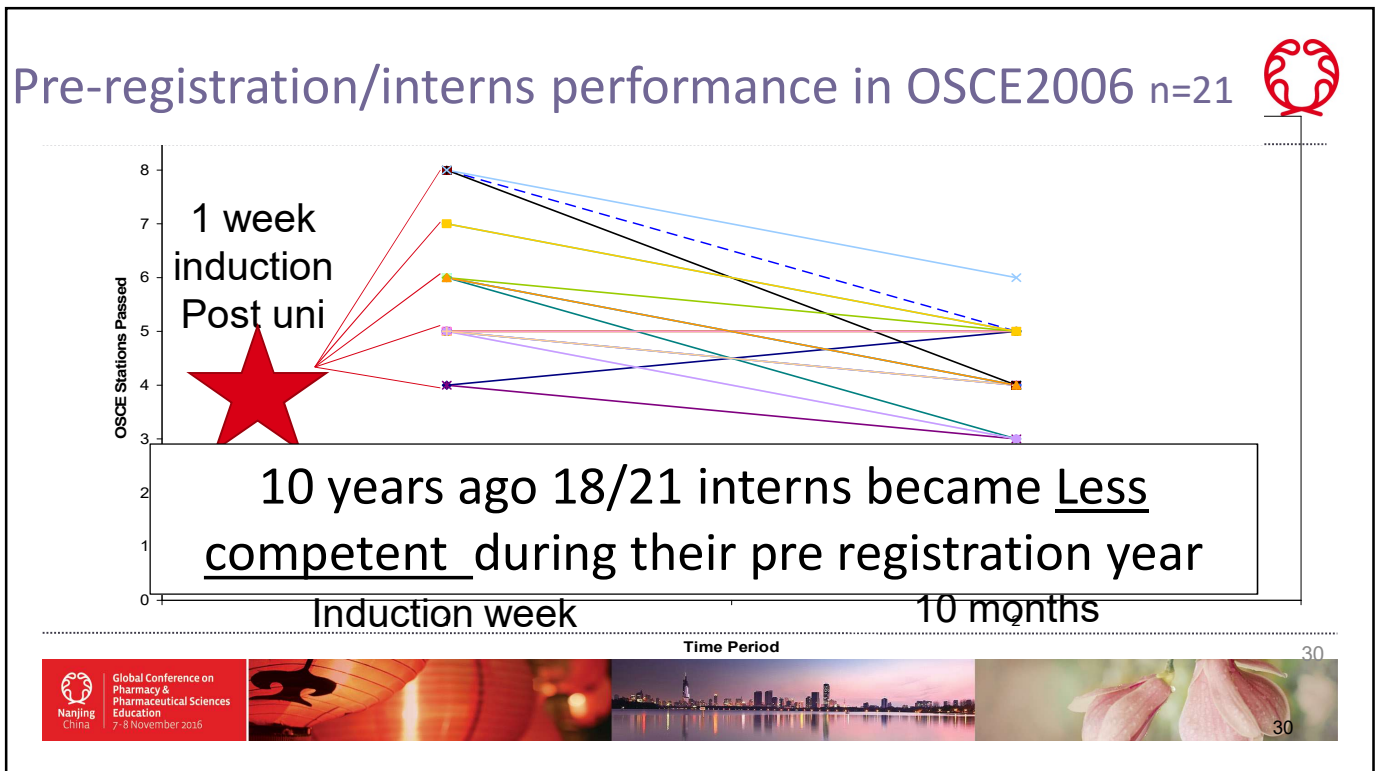
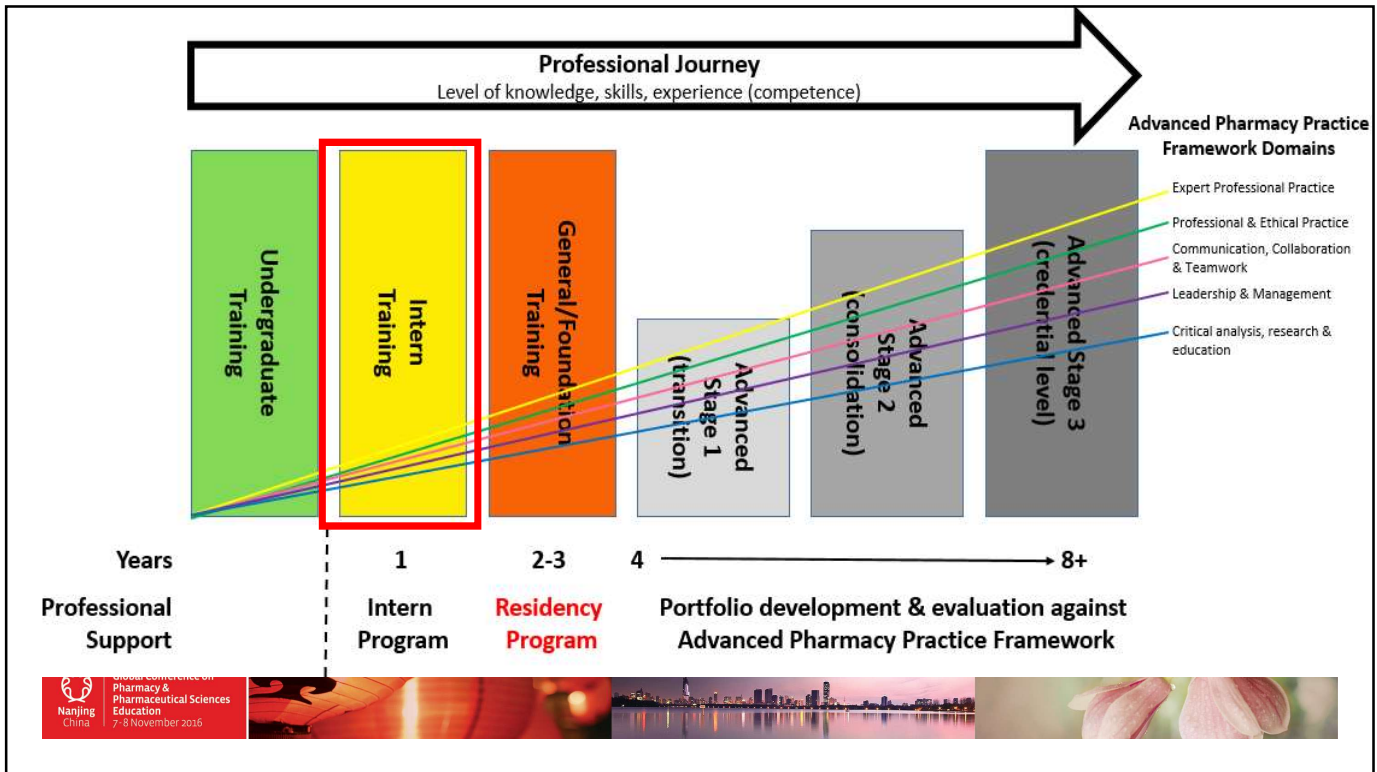


Why use competency frameworks to guide evaluation and feedback ?

A controlled study of the General Level framework: Results of the South of England Competency study
 Antoniou S, Webb D, McRobbie D Davies JG, Bates I



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Hospital intern training Supported by Intern level Framework

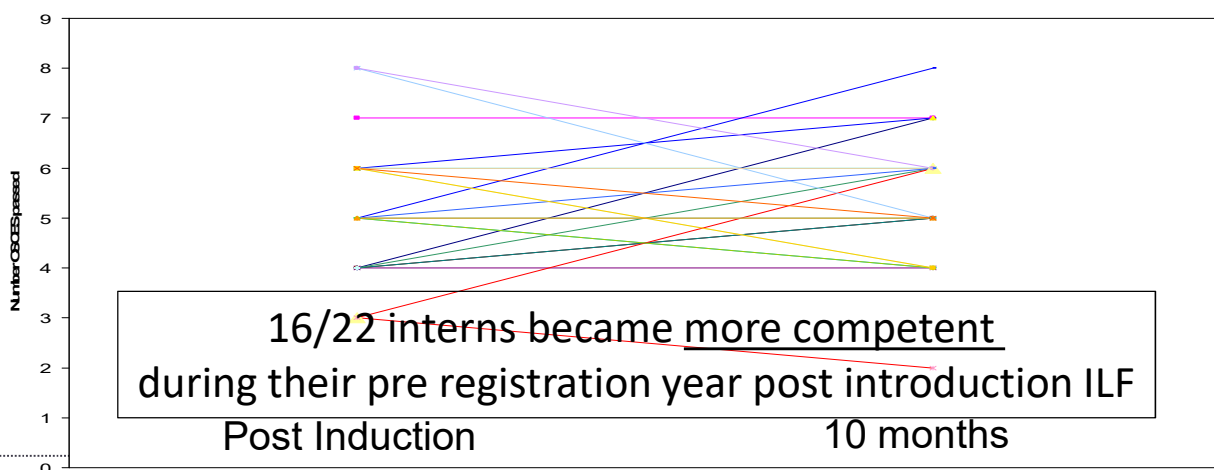


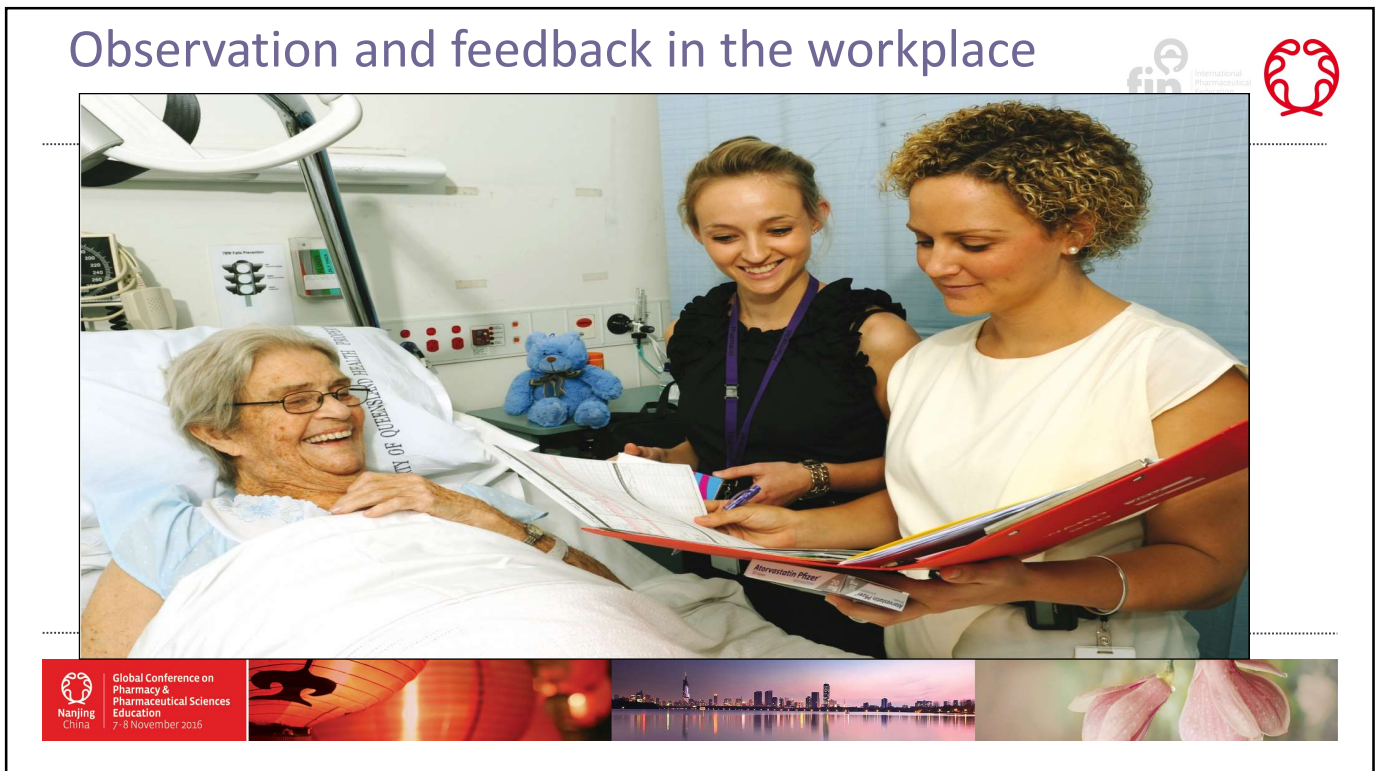
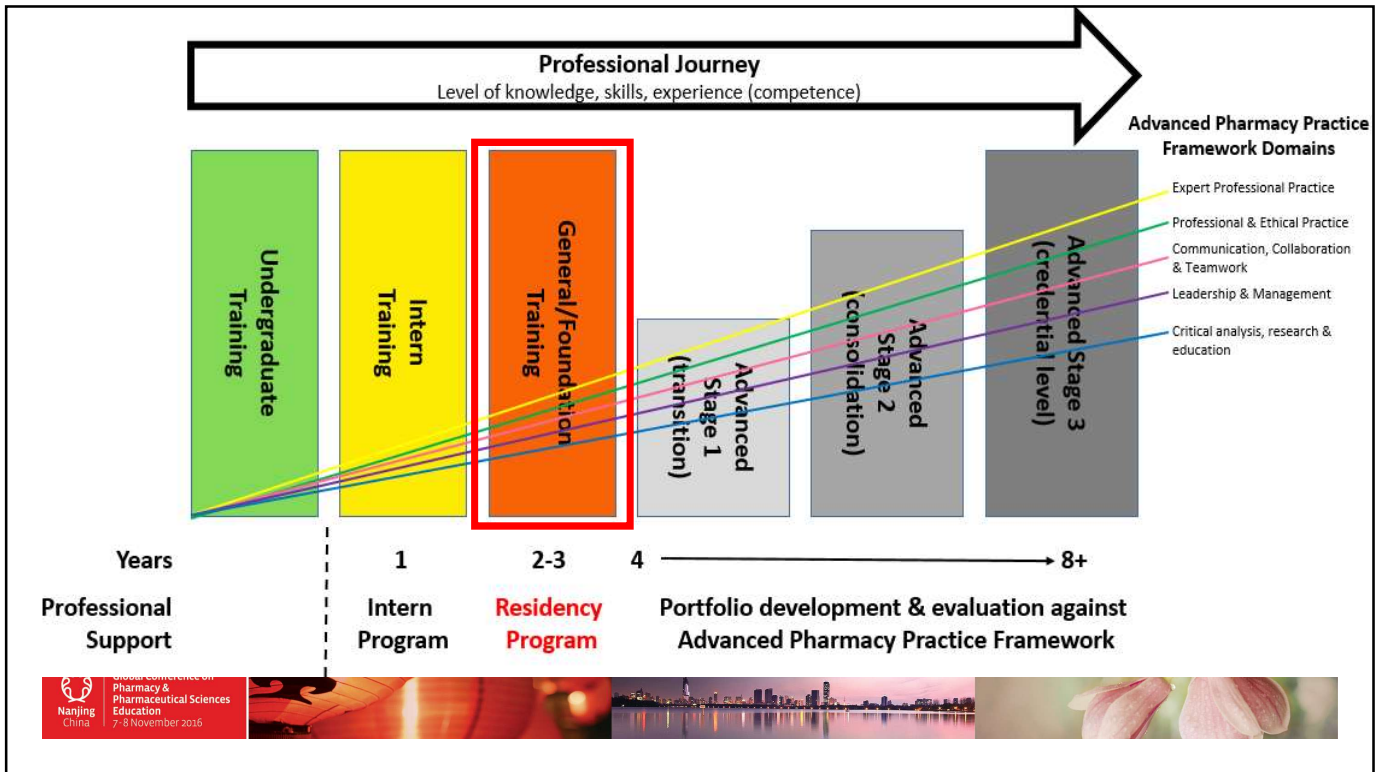
- Performance based competency framework
- Complements Intern Training Program
- Log of activities and competencies
 - History taking
 - Problem identification and resolution
 - Counseling
- Self and peer evaluation

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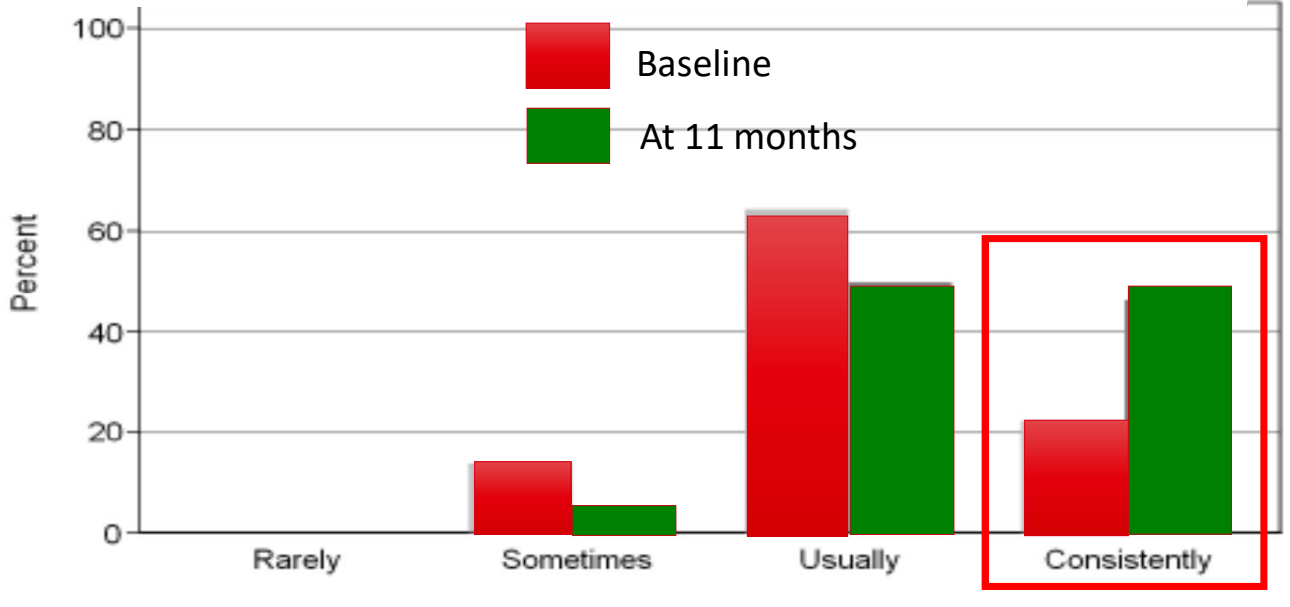
Number of OSCE stations at the end of induction and end of intern year 2009 (N=22)



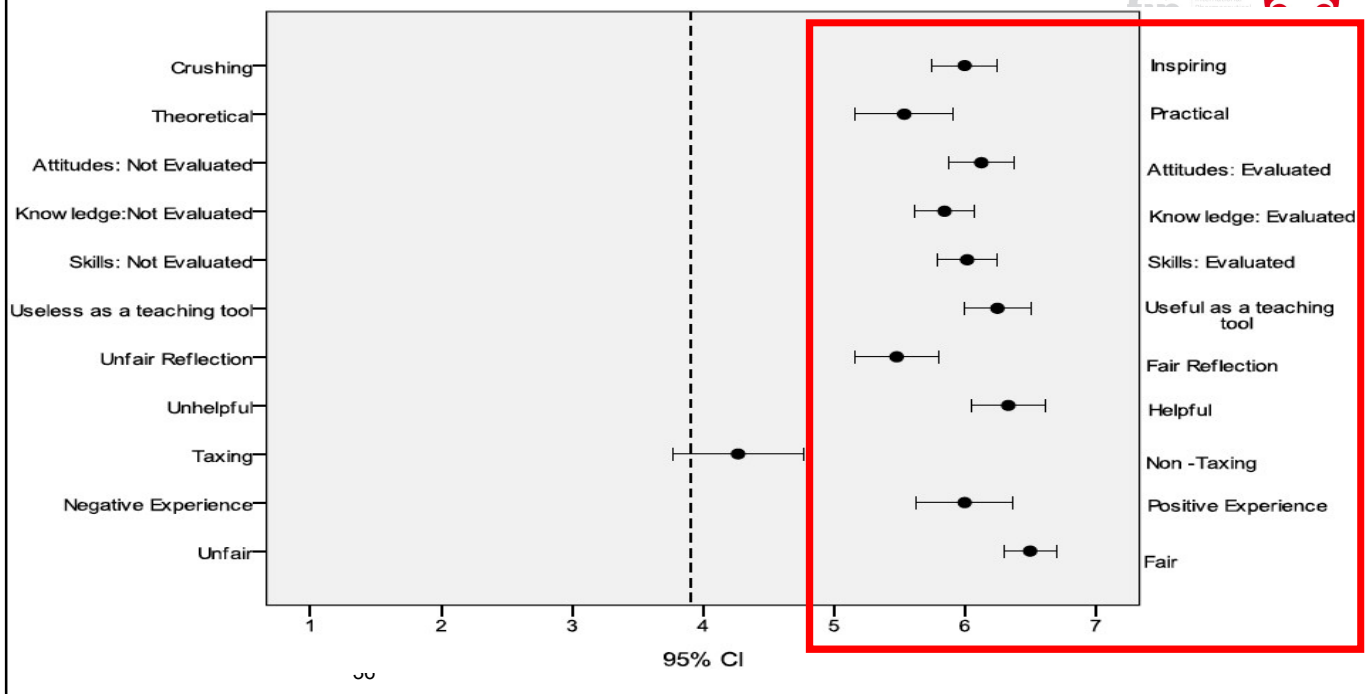


Improvement in Pharmacist's Performance Facilitated by an Adapted Competency-Based General Level Framework

Ian Coombes, Minyon Avent, Lynda Cardiff, Karen Bettenay, Judith Coombes, Karen Whitfield, Julie Stokes, Graham Davies, Ian Bates



Views on baseline n=55/66 pharmacists



SHPA Residency from 2017...



- Lack existing formal, structured experiential training program
 - Barrier to expansion of pharmacists roles and scopes
- Accredited 2 year structured residency program
- Underpinned by Clinical Competency Framework (Clin CAT)



SHPA Residency: Experiential learning



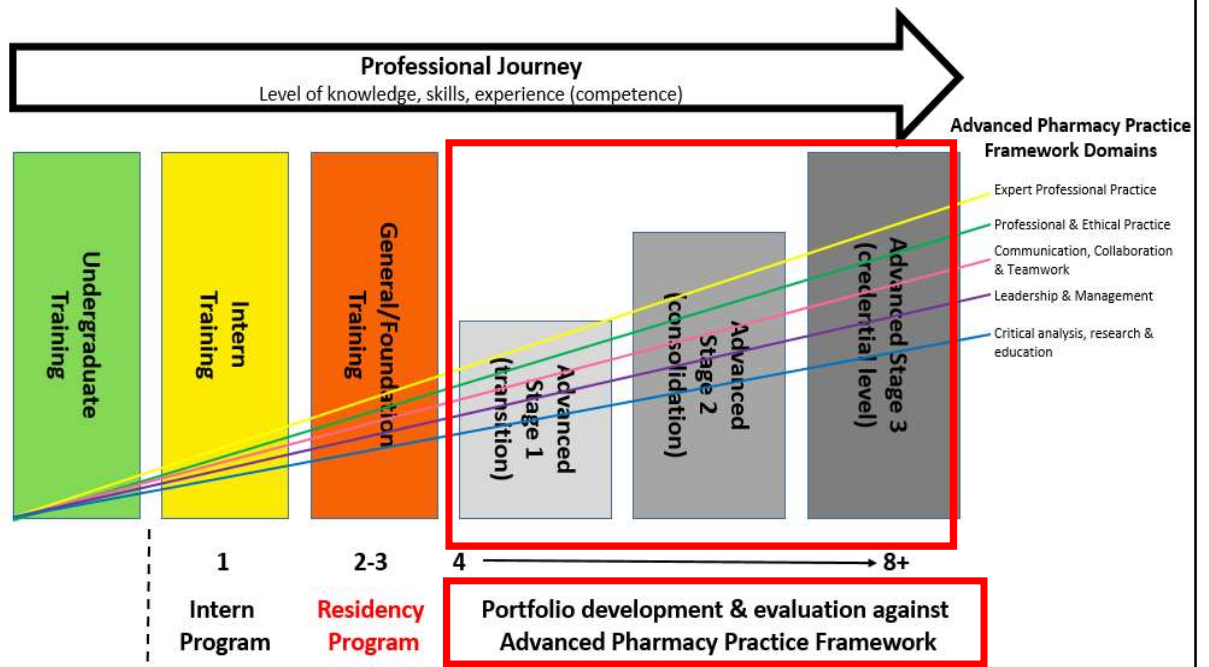
| | Jan-June | Jul - Dec |
|-------------|----------|----------------------------------|
| Intern year | | |
| Year 1 | Medical | Dispensary, medicine information |
| Year 2 | Surgical | Sub Specialities |



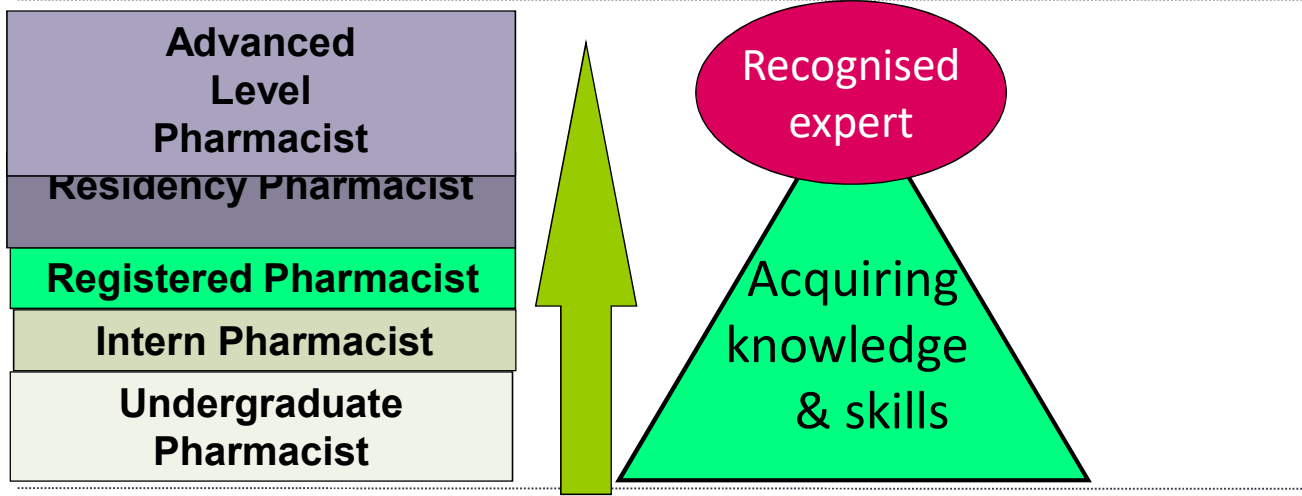
SHPA Residency: Evaluation and Feedback



| | Jan-June | Jul - Dec |
|----------------------|-------------------------------------------------------|----------------|
| ClinCAT Framework | < 2 months | < 2 months |
| Case Base Discussion | 1 per rotation | 1 per rotation |
| Mini Clinical Exam | 1 x >3 months | 1 x >3 months |
| 360° Assessment | | 1 per 12 month |
| Portfolio | Evaluations, education, supervision, audits, meetings | |



Pharmacist Development

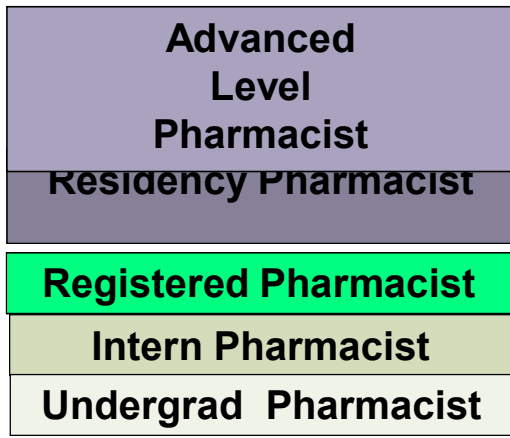


Role of Advanced practitioners

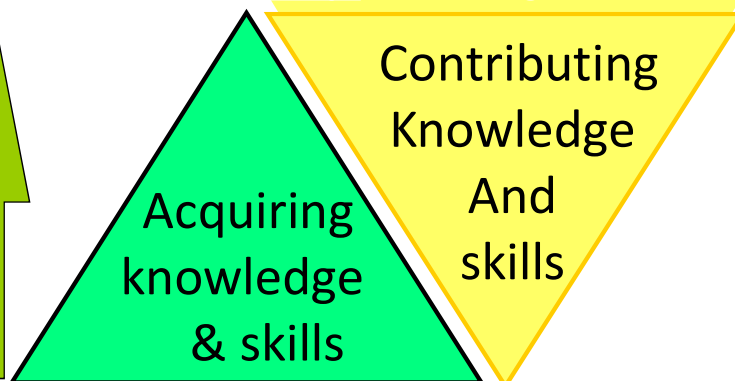


To lead development of all workforce

Sustainable Pharmacist workforce development

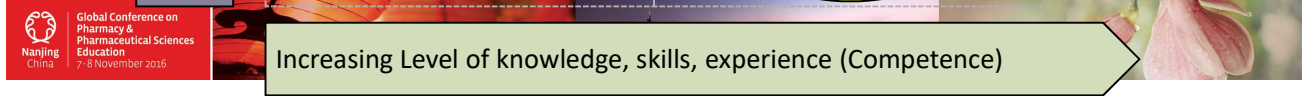
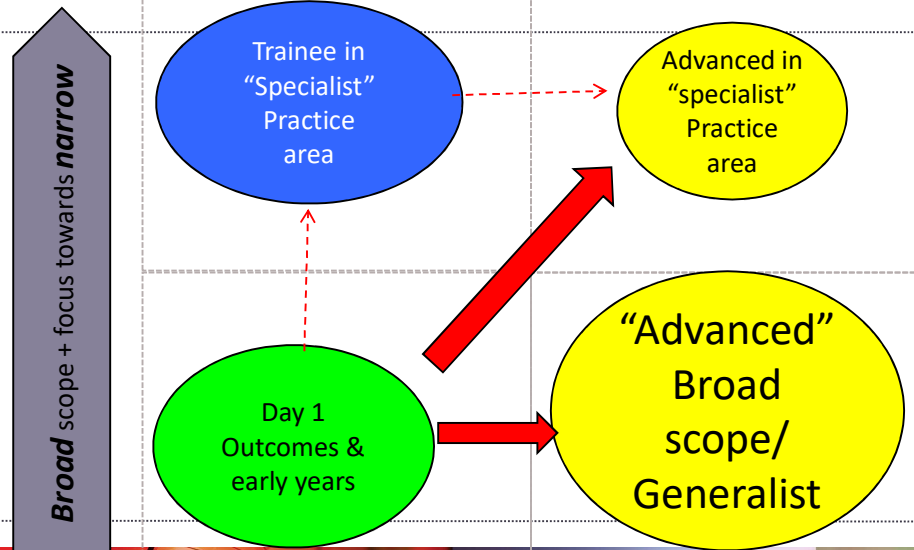


Research, Education, **Leadership** and management



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"Specialist" generalist or focused advanced pharmacist



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Increasing Level of knowledge, skills, experience (Competence)

WHO/FIP 8 Star Pharmacist



Communicator

Life-long learner

Teacher

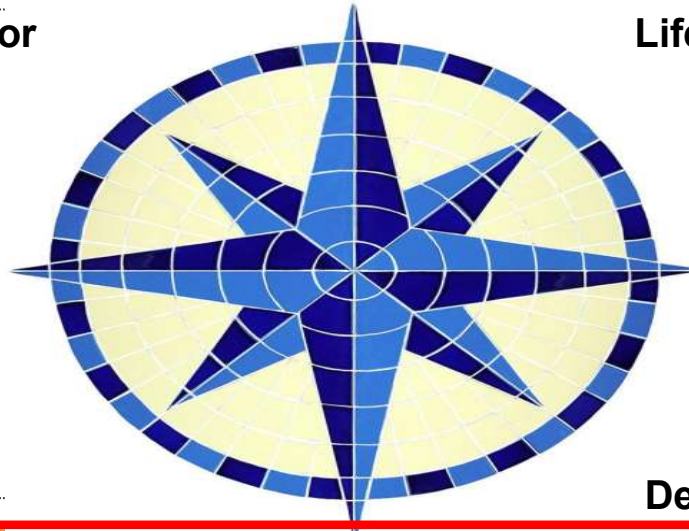
Researcher

Caregiver

Manager

Leader

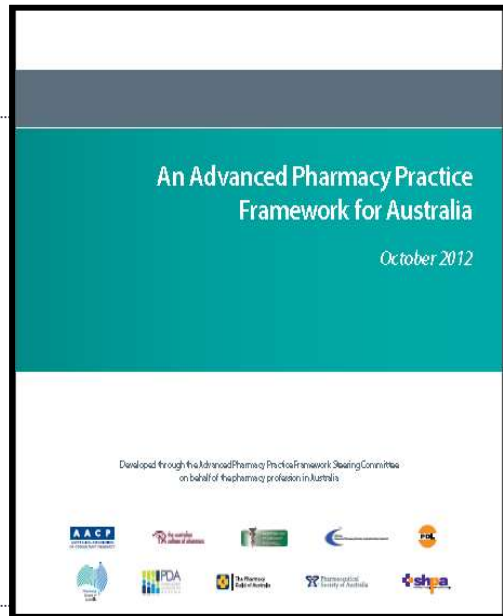
Decision Maker



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Competency Domains of Advanced Level Framework



Expert Professional Practice

1. Domain: e.g. *Promote and contribute to the optimal use of medicines*

Networking, Leadership, Influence

2. Domain: Communication, collaboration, teamwork

3. Domain: Leadership and Management

4. Domain: Professional and ethical practice

5. Domain: Critical analysis, research and education



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Recognition and credentialing advanced practice



- 2015: Australia Pharmacy Council undertook a pilot of credentialing pharmacists against APPF
- Independent evaluation, feedback and recognition
- 43 pharmacists evaluated
- Currently in transition from APC to Professional bodies to seek a sustainable model



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Summary



- Patients and providers expect competent workforce
- Improvement in patient care requires optimal pharmaceutical care
- Competency frameworks determine practice and form basis of a curriculum
- Evaluation and feedback against frameworks directs individuals life long learning and development



谢谢 (謝謝)

(Thank you)

